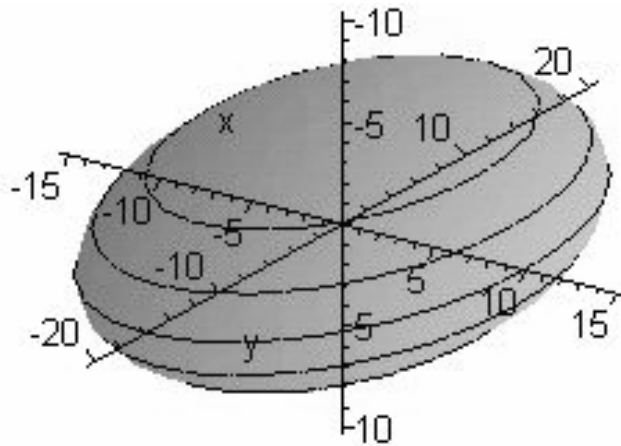
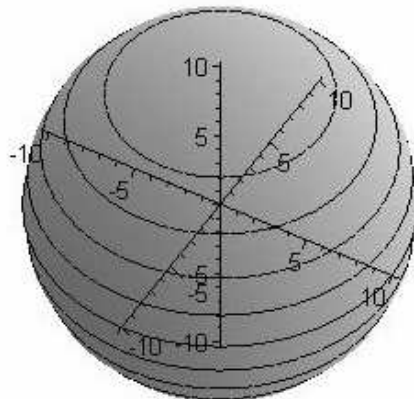


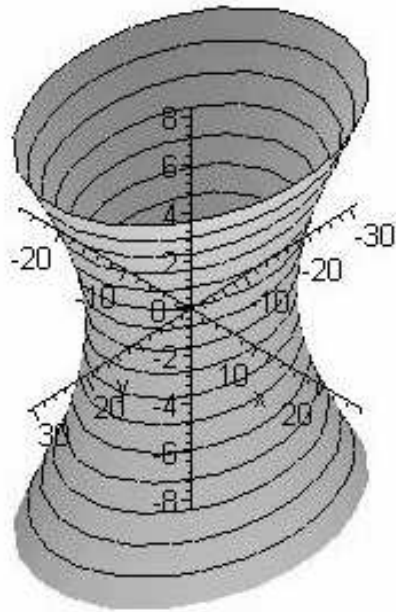
## Reelle Flächen 2. Ordnung



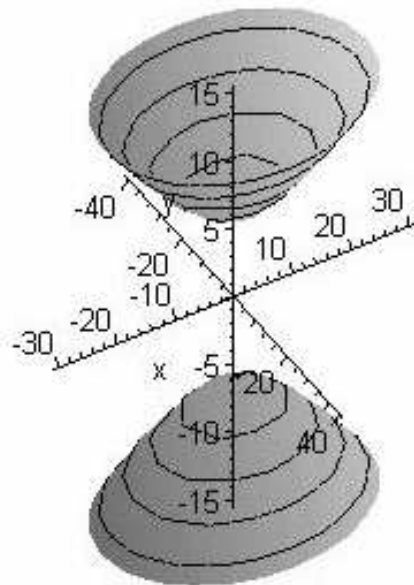
Ellipsoid:  $\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$



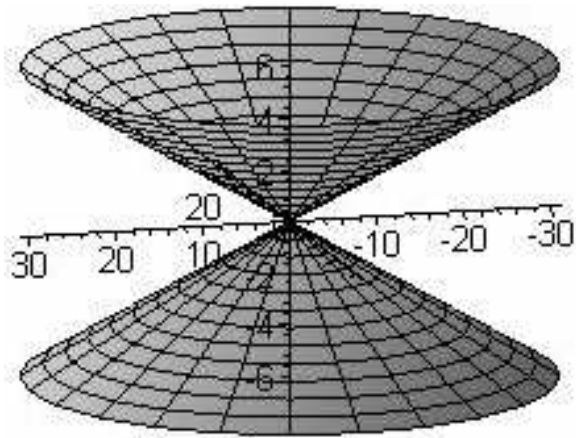
Spezialfall: Kugel:  $x^2 + y^2 + z^2 = a^2$



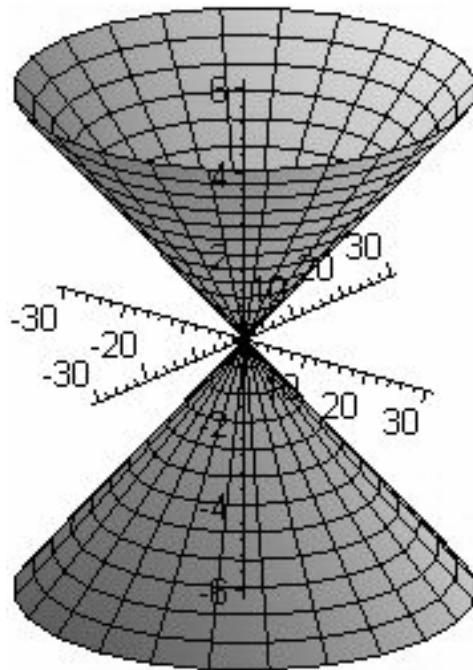
Einschaliges Hyperboloid:  $\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1$



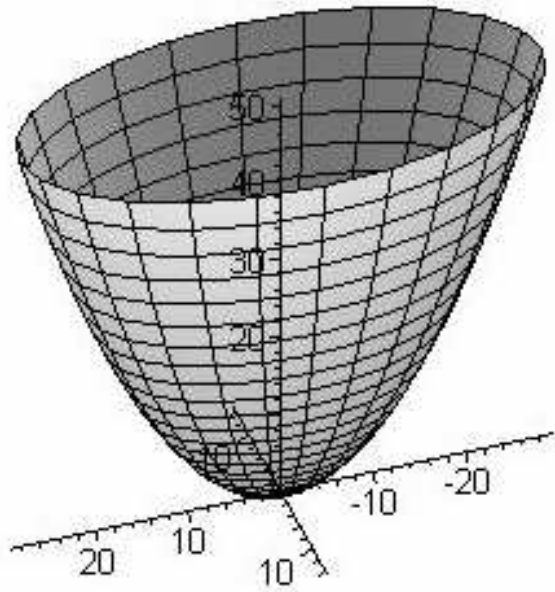
Zweischaliges Hyperboloid:  $\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = -1$



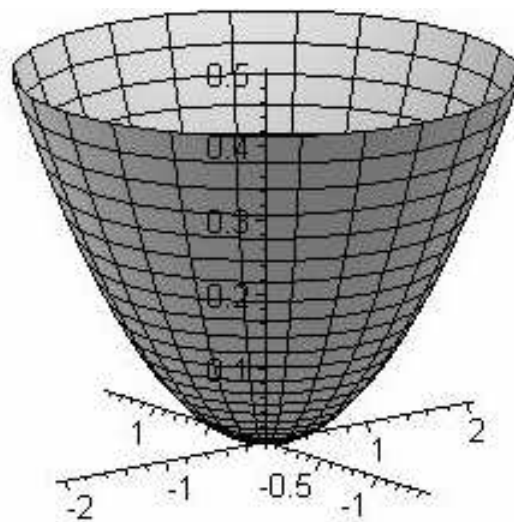
Elliptischer Doppelkegel:  $\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 0$



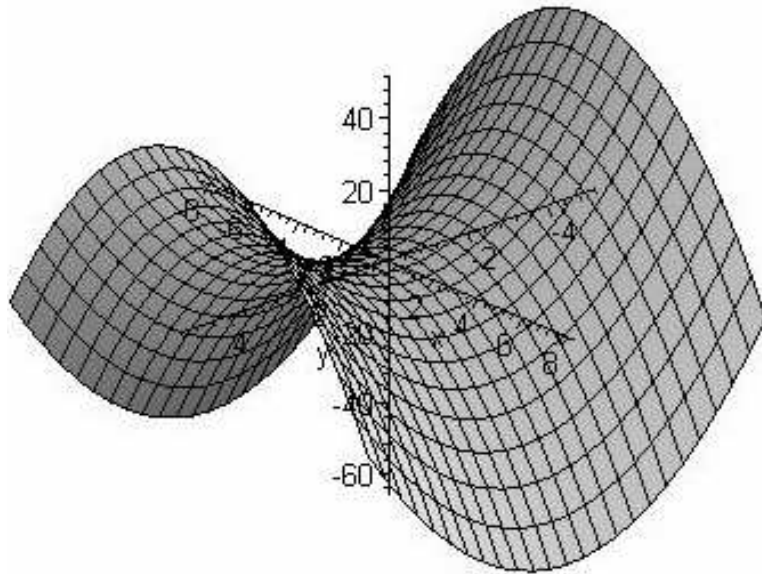
Spezialfall: Kreiskegel:  $x^2 + y^2 - z^2 = 0$



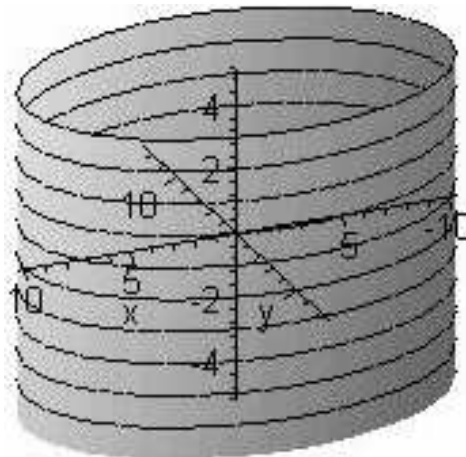
Elliptisches Paraboloid:  $z = \frac{x^2}{2p} + \frac{y^2}{2q}$



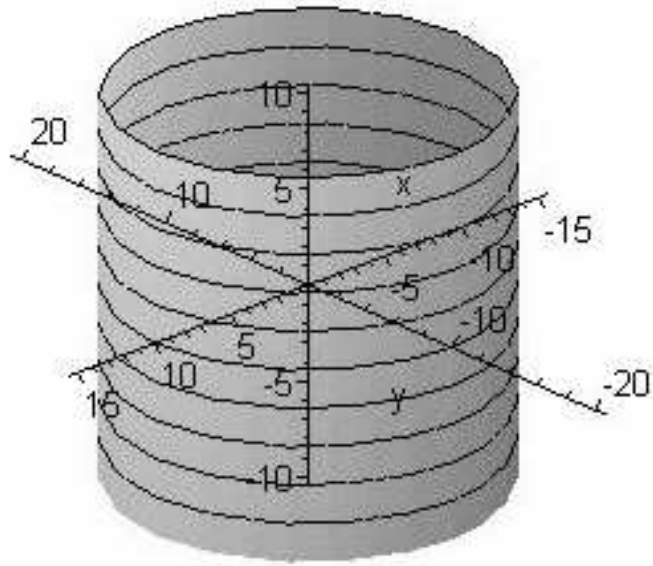
Spezialfall: Rotationsparaboloid:  $z = x^2 + y^2$



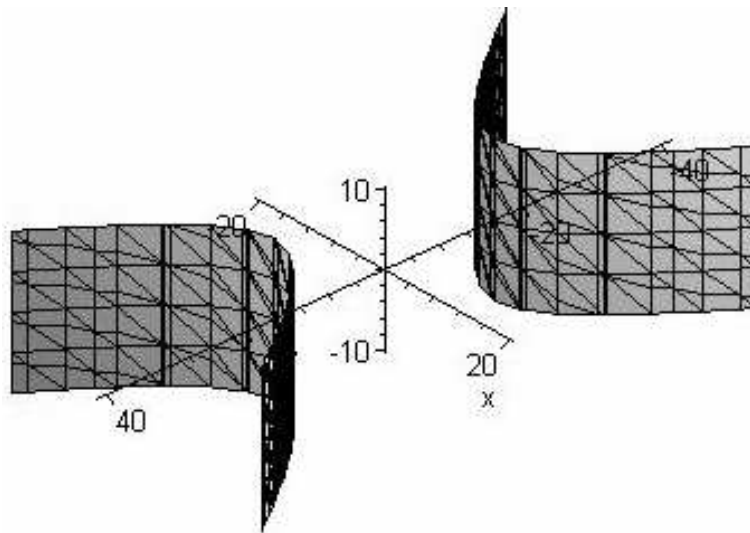
Hyperbolisches Paraboloid:  $z = \frac{x^2}{2p} - \frac{y^2}{2q}$



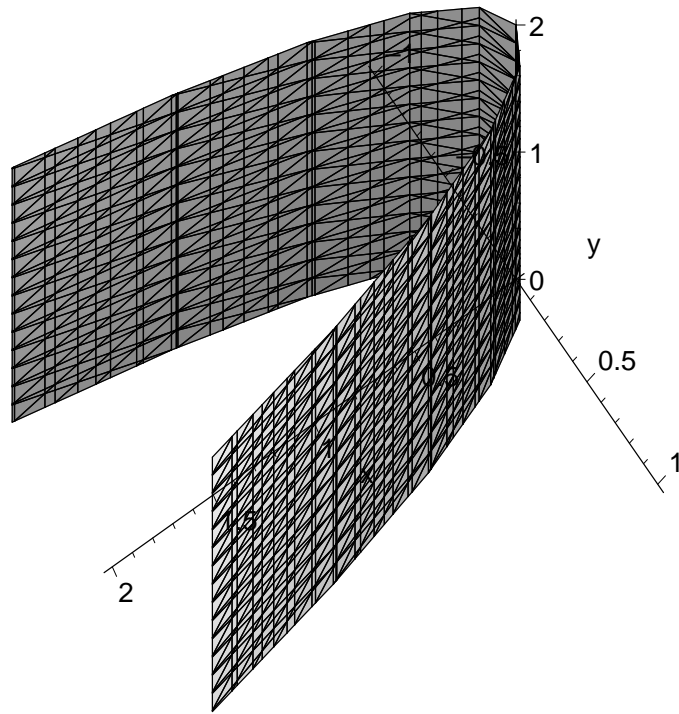
Elliptischer Zylinder:  $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$



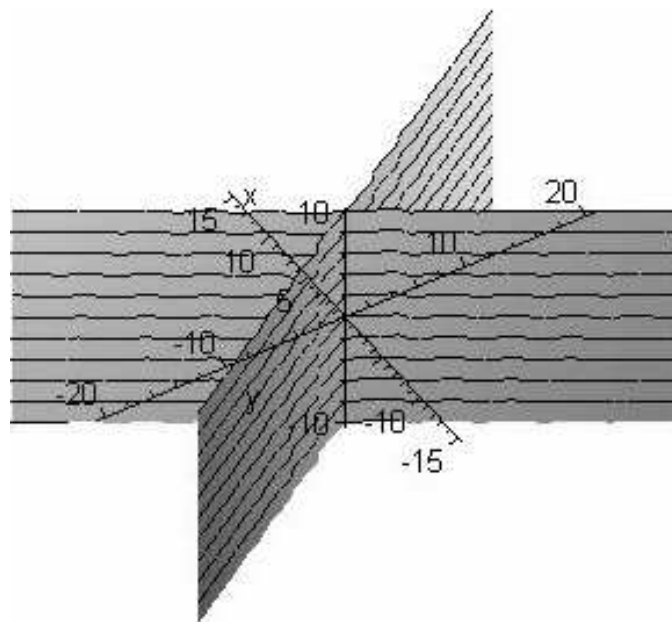
Spezialfall: Kreiszyylinder:  $x^2 + y^2 = a^2$



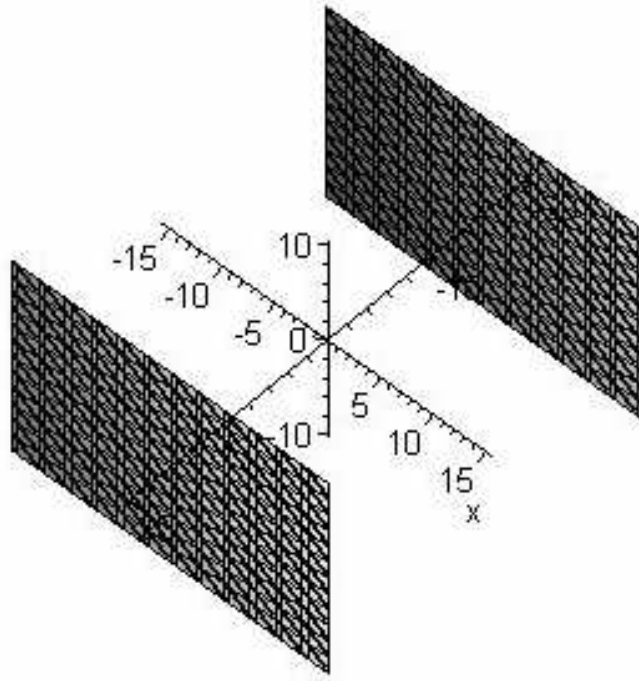
Hyperbolischer Zylinder:  $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 1$



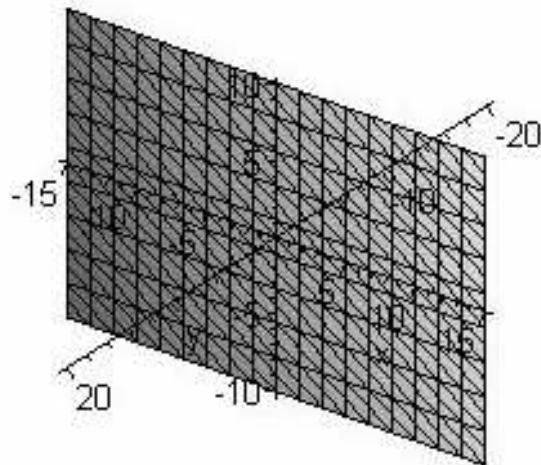
Parabolischer Zylinder:  $y^2 = 2px$



Paar reeller sich schneidender Ebenen:  $\frac{x^2}{a^2} - \frac{y^2}{b^2} = 0$



Paar reeller paralleler Ebenen:  $\frac{x^2}{a^2} = 1$



Paar zusammenfallender Ebenen:  $x^2 = 0$